Application No.: 10/510,220

Office Action Dated: September 27, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A compound according to the general Formula (I)

the pharmaceutically acceptable acid or base addition salts thereof, the stereochemically isomeric forms thereof and the *N*-oxide form thereof, wherein:

X is CH_2 , $N-R^7$, S or O;

R⁷ is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, alkylcarbonyl, alkyloxycarbonyl and mono- and di(alkyl)aminocarbonyl;

R¹ and R² are each selected from the group of hydrogen, hydroxy, cyano, halo, OSO₂H, OSO₂CH₃, N-R¹⁰R¹¹, alkyloxy, alkyloxyalkyloxy, alkyloxyalkyloxyalkyloxy, tetrahydrofuranyloxy, alkylthio, alkylcarbonyloxy, alkyloxyalkyloxyalkyloxyonyloxy, pyridinylcarbonyloxy, alkylcarbonyloxyalkyloxy, alkyloxycarbonyloxy, alkenyloxy, alkenyloxy and mono- or di(alkyl)aminoalkyloxy;

with the proviso that at least one of R^1 and R^2 is $N-R^{10}R^{11}$ wherein :

R¹⁰ and R¹¹ are each, independently from each other, selected from the group of hydrogen, alkyl, Het, Ar, Ar-alkyl, Het- alkyl, mono- or di(alkyl)aminoalkyl, mono- or di(alkenyl)aminoalkyl, alkylcarbonyl, alkenylcarbonyl, Ar-carbonyl, Het-carbonyl, alkyloxycarbonyl, aminocarbonyl, mono- or di(alkyl)aminocarbonyl, mono- or di(alkyl)aminocarbonylalkyl)aminocarbonyl, alkylcarbonyloxyalkyl, alkenylcarbonyloxyalkyl, mono-or di(alkyl)aminocarbonyloxyalkyl, aminoiminomethyl, alkylaminoiminomethyl, N-benzylpiperazinyliminomethyl, alkylsulphonyl and Ar-sulphonyl; or

R¹⁰ and R¹¹ may be taken together and with the N may form a monovalent radical selected from the group of

Application No.: 10/510,220

Office Action Dated: September 27, 2006

$$(R^{13})_q$$
 $(R^{13})_q$
 $(R^{13})_q$

wherein:

R¹² is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, Ar-alkenyl, alkylcarbonyl, alkyloxycarbonyl, alkyloxyalkylcarbonyl and mono- or di(alkyl)-aminocarbonyl;

each ring having optionally 1, 2 or 3 double bonds and each ring being optionally substituted with q radicals R¹³, each radical R¹³ independently from each other selected from the group of alkyl, oxo, Ar, Ar-alkyl, Ar-alkenyl and alkyloxycarbonyl and q being an integer ranging from 0 to 6;-or

a and b are asymmetric eentres centers;

 $(CH_2)_m$ is a straight hydrocarbon chain of m carbon atoms, m being an integer ranging from 1 to 4;

Pir is a radical according to any one of Formula (IIa), (IIb) or (IIc)

Office Action Dated: September 27, 2006

$$(\underline{\mathbf{H}}^{8})_{n} \qquad (\underline{\mathbf{H}}^{8})_{n} \qquad (\underline{\mathbf{H}}^{8})_{n} \qquad (\underline{\mathbf{H}}^{8})_{n} \qquad (\underline{\mathbf{H}}^{2})_{n} \qquad (\underline{\mathbf{H}^{2}})_{n} \qquad (\underline{\mathbf{H}}^{2})_{n} \qquad (\underline{\mathbf$$

optionally substituted with n radicals R⁸, wherein:

each R⁸ is independently from each other, selected from the group of hydroxy, amino, nitro, cyano, halo and alkyl;

n is an integer ranging from 0 to 5;

R⁹ is selected from the group of hydrogen, alkyl and formyl;

R³ is a radical according to any one of Formula (IIIa), (IIIb) or (IIIc)

wherein:

is a single bond while Z is either a bivalent radical selected from the group of $-CH_2$ -, -C(=O)-, -CH(OH)-, -C(=N-OH)-, -CH(alkyl)-, -O-, -S-, -S(=O)-, -NH- and -SH-; or Z is a trivalent CH-moiety that forms a covalent bond with R^4 equal to alkyl, such that a cycloalkyl moiety is formed; or d is a double bond while Z is either a trivalent radical of formula =CH- or =C(alkyl)-; or Z is a trivalent CH-moiety that forms a covalent bond with R^4 equal to alkyl, such that a cycloalkenyl moiety is formed;

A is a 5- or 6-membered aromatic homocyclic or heterocyclic ring, selected from the group of phenyl, pyranyl, pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, thienyl, isothiazolyl, pyrrolyl, imidazolyl, pyrazolyl, furanyl, oxadiazolyl and Page 4 of 21

Application No.: 10/510,220

Office Action Dated: September 27, 2006

isoxazolyl;

p is an integer ranging from 0 to 6;

- R⁴ and R⁵ are each, independently from each other, selected from the group of hydrogen, alkyl, Ar, biphenyl, halo and cyano; or
- R^4 and R^5 may be taken together to form a bivalent radical - R^4 - R^5 selected from the group of - CH_2 -, - CH_2 -, - CH_2 - CH_2 -, - CH_2 -CH-, - CH_2 -, - CH_2 -,
- each R⁶ is independently from each other, selected from the group of hydroxy, amino, nitro, cyano, halo, carboxyl, alkyl, Ar, alkyloxy, Ar-oxy, alkylcarbonyloxy, alkyloxycarbonyl, alkylthio, mono- and di(alkyl)amino, alkylcarbonylamino, mono- and di(alkyl)aminocarbonyl, mono- and di(alkyl)aminocarbonyloxy, mono- and di(alkyl)aminoalkyloxy; or
- two vicinal radicals R^6 may be taken together to form a bivalent radical $-R^6$ - R^6 selected from the group of $-CH_2$ - CH_2 -O-, -O- CH_2 - CH_2 -, -O- CH_2 - CH_2 -O-, $-CH_2$ - CH_2 - CH_2 -O-, $-CH_2$ - CH_2 - CH_2
- R¹⁶ is selected from the group of hydrogen, alkyl, Ar and Ar-alkyl;
- alkyl represents a straight or branched saturated hydrocarbon radical having from 1 to 6 carbon atoms or a cyclic saturated hydrocarbon radical having from 3 to 6 carbon atoms, optionally substituted with one or more methyl, halo, cyano, oxo, hydroxy, alkyloxy or amino radicals;
- alkenyl represents a straight or branched unsatured hydrocarbon radical having one or more double bonds, optionally substituted with one or more methyl, halo, cyano, oxo, hydroxy, alkyloxy or amino radicals;

Office Action Dated: September 27, 2006

Ar represents phenyl or naphthyl, optionally substituted with one or more radicals selected from the group of alkyl, halo, cyano, oxo, hydroxy, alkyloxy and amino; and

Het is a monocyclic heterocyclic radical selected from the group of azetidinyl, pyrrolidinyl, dioxolyl, imidazolidinyl, pyrrazolidinyl, piperidinyl, homopiperidinyl, morpholinyl, dithianyl, thiomorpholinyl, piperazinyl, imidazolidinyl, tetrahydrofuranyl, 2H pyrrolyl, pyrrolinyl, imidazolinyl, pyrrazolinyl, pyrrazolyl, imidazolyl, pyrazolyl, triazolyl, furanyl, thienyl, oxazolyl, isoxazolyl, thiadiazolyl, isothiazolyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl and triazinyl and benzylpiperazinyl.; each radical optionally substituted with one or more radicals selected from the group of alkyl, Ar, Ar alkyl, halo, cyano, oxo, hydroxy, alkyloxy and amino.

2. (Currently Amended) A compound according to claim 1, wherein

X is O:

 R^1 and R^2 are each selected from the group of hydrogen, $N-R^{10}R^{11}$ and alkyloxy; with the proviso that at least one of R^1 and R^2 is $N-R^{10}R^{11}$ wherein:

 R^{10} and R^{11} are each, independently from each other, selected from the group of hydrogen, alkyl, Het, Ar, Ar-alkyl, Het- alkyl, mono- or di(alkyl)aminoalkyl, mono- or di(alkenyl)aminoalkyl, alkylcarbonyl, alkenylcarbonyl, Ar-carbonyl, Het-carbonyl, alkyloxycarbonyl, aminocarbonyl, mono- or di(alkyl)aminocarbonyl, mono- or di(alkyloxycarbonylalkyl)aminocarbonyl, alkylcarbonyloxyalkyl, alkenylcarbonyloxyalkyl, mono-or di(alkyl)aminocarbonyloxyalkyl, N-benzylpiperazinyliminomethyl, alkylsulphonyl and Ar-sulphonyl; or R^{10} and R^{11} may be taken together and with the N may form a monovalent radical selected from the group of

$$(R_{p}^{13})_{q}$$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$
 $(R_{p}^{13})_{q}$

Page 6 of 21

Application No.: 10/510,220

Office Action Dated: September 27, 2006

$$\begin{array}{c}
(R^{13})_q \\
N \\
\end{array}$$
and
$$\begin{array}{c}
(R^{13})_q \\
N \\
\end{array}$$

wherein:

 R^{12} is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl and Ar-alkenyl; each ring having optionally a double bond and each ring being optionally substituted with q radicals R^{13} , each radical R^{13} independently from each other selected from the group of alkyl, oxo and alkyloxycarbonyl and q being an integer ranging from 0 to 2; Θ

R¹ and R² may be taken together to form a bivalent radical O CH₂ CH₂ NR¹⁴ wherein R¹⁴ is selected from the group of hydrogen, alkyl, alkylcarbonyl, alkylcarbonyl and mono or di(alkyl)aminocarbonyl;

a and b are asymmetric centres;

alkyl

alkenyl

 $(CH_2)_m$ is a straight hydrocarbon chain of m carbon atoms, m being an integer equal to 1 ;

Pir is a radical according to Formula (IIa)

R³ represents an optionally substituted aromatic homocyclic or heterocyclic ring system together with an optionally substituted and partially or completely hydrogenated hydrocarbon chain of 1 to 6 atoms long with which said ring system is attached to the Pir radical and of which may contain one or more heteroatoms selected from the group of O, N and S;

represents a straight or branched saturated hydrocarbon radical having from 1 to 6 carbon atoms or a cyclic saturated hydrocarbon radical having from 3 to 6 carbon atoms, optionally substituted with one or more methyl or amino radicals; represents a straight or branched unsatured hydrocarbon radical having one or more double bonds, optionally substituted with one or more methyl radicals;

PATENT

DOCKET NO.: JANS-0071/JAB-1690

Application No.: 10/510,220

Office Action Dated: September 27, 2006

Ar represents phenyl, optionally substituted with one or more radicals selected from the group of alkyl, halo, cyano, hydroxy and alkyloxy; and

Het is a monocyclic heterocyclic radical selected from the group of azetidinyl, pyrrolidinyl, piperidinyl, homopiperidinyl, morpholinyl, piperazinyl, Nbenzylpiperazinyl, tetrahydrofuranyl and pyridinyl.

3. (Cancelled)

- 4. (Previously Presented) A compound according claim 1, wherein R³ is a radical according to any one of Formula (IIIa), (IIIb) or (IIIc) wherein:
- d is a double bond while Z is a trivalent radical of formula =CH- or =C(alkyl)-;
- A is phenyl,
- p is an integer equal to 0 or 1;
- R⁴ and R⁵ are each, independently from each other, selected from the group of hydrogen and alkyl;

each R⁶ is halo; and

R¹⁶ is hydrogen.

- 5. (Previously Presented) A compound according to claim 1, wherein X=O, one of R^1 and R^2 is hydrogen, methoxy or ethoxy; m = 1; Pir is a radical according to Formula (IIa) wherein n = 0; R^3 is a radical according to Formula (IIIb) wherein Z is =CH-, d is a double bond, A is a phenyl ring, R^4 is methyl and R^5 and R^{16} are each hydrogen.
- 6. (Previously Presented) A compound according to claim 1, wherein R¹ is hydrogen or methoxy and R² is an amine radical NR¹⁰R¹¹; X=O; m = 1; Pir is a radical according to Formula (IIa) wherein n = 0; R³ is a radical according to Formula (IIIb) wherein Z is =CH-, d is a double bond, A is a phenyl ring, R⁴ is methyl and R⁵ and R¹⁶ are each hydrogen.

7. (Cancelled)

Application No.: 10/510,220

Office Action Dated: September 27, 2006

8. (Cancelled)

9. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically

acceptable carrier and, as active ingredient, a therapeutically effective amount of a

compound according to claim 1.

10. (Previously Presented) A process for making a pharmaceutical composition, comprising

mixing a compound according to claim 1 and a pharmaceutically acceptable carrier.

11. (Cancelled)

12. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically

acceptable carrier and, as active ingredient, a therapeutically effective amount of a

compound according to claim 1, and one or more other compounds selected from the

group of antidepressants, anxiolytics and antipsychotics.

13. (Cancelled)

14. (Previously Presented) A method for the treatment of depression, anxiety and body

weight disorders, said treatment comprising the simultaneous or sequential

administration of a therapeutically effective amount of a compound according to claim 1,

and one or more other compounds selected from the group of antidepressants, anxiolytics

and antipsychotics, to a patient in need of treatment.

15. (Cancelled)

16. (Cancelled)

17. (Previously Presented) A process for making a pharmaceutical composition comprising

mixing a compound according to claim 1, and a compound selected from the group of

Page 9 of 21

Application No.: 10/510,220

Office Action Dated: September 27, 2006

antidepressants, anxiolytics and antipsychotics and a pharmaceutically acceptable carrier.

18. (Currently Amended) A process for preparing a compound according to Formula (I),

$$R^1$$
 R^2 R^3 R^3 R^3 R^3

the pharmaceutically acceptable acid or base addition salts thereof, the stereochemically isomeric forms thereof and the *N*-oxide form thereof, wherein:

X is CH_2 , $N-R^7$, S or O;

R⁷ is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, alkylcarbonyl, alkyloxycarbonyl and mono- and di(alkyl)aminocarbonyl;

wherein at least one of R¹ and R² is a halogen and at most one of R¹ and R² is selected from the group of hydrogen, hydroxy, cyano, halo, OSO₂H, OSO₂CH₃, N-R¹⁰R¹¹, alkyloxy, alkyloxyalkyloxy, alkyloxyalkyloxy, tetrahydrofuranyloxy, alkylthio, alkylcarbonyloxy, alkyloxyalkylcarbonyloxy, pyridinylcarbonyloxy, alkylcarbonyloxy, alkyloxycarbonyloxy, alkenyloxy, alkenyloxy, alkenyloxy, alkyloxycarbonyloxy, alkenyloxy, alkenyloxy and mono- or di(alkyl)aminoalkyloxy;

with the proviso that at least one of R^1 and R^2 is $N-R^{10}R^{11}$ wherein:

R¹⁰ and R¹¹ are each, independently from each other, selected from the group of hydrogen, alkyl, Het, Ar, Ar-alkyl, Het- alkyl, mono- or di(alkyl)aminoalkyl, mono- or di(alkenyl)aminoalkyl, alkylcarbonyl, alkenylcarbonyl, Ar-carbonyl, Het-carbonyl, alkyloxycarbonyl, aminocarbonyl, mono- or di(alkyl)aminocarbonyl, mono- or di(alkyl)aminocarbonyl, alkylcarbonyloxyalkyl, alkenylcarbonyloxyalkyl, mono-or di(alkyl)aminocarbonyloxyalkyl, aminoiminomethyl, alkylaminoiminomethyl, N-benzylpiperazinyliminomethyl, alkylsulphonyl and Ar-sulphonyl; or

R¹⁰ and R¹¹ may be taken together and with the N may form a monovalent radical selected from the group of

Application No.: 10/510,220

Office Action Dated: September 27, 2006

$$(R^{13})_q$$
 $(R^{13})_q$
 $(R^{13})_q$

wherein:

R¹² is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, Ar-alkenyl, alkylcarbonyl, alkyloxycarbonyl, alkyloxyalkylcarbonyl and mono- or di(alkyl)-aminocarbonyl;

each ring having optionally 1, 2 or 3 double bonds and each ring being optionally substituted with q radicals R^{13} , each radical R^{13} independently from each other selected from the group of alkyl, oxo, Ar, Ar-alkyl, Ar-alkenyl and alkyloxycarbonyl and q being an integer ranging from 0 to 6; $\frac{1}{100}$

R¹ and R²—may be taken together to form a bivalent radical—R¹—R²—selected from the group of O CH₂ NR¹⁴—, NR¹⁴—CH₂ O , NR¹⁵—CH₂ NR¹⁴—, NR¹⁴—CH₂ CH₂ O , O CH₂ CH₂ NR¹⁴—, NR¹⁵—CH₂ CH₂ NR¹⁴—, wherein R¹⁴ and R¹⁵—each, independently from each other, are selected from the group of hydrogen, alkyl, Ar, Ar alkyl, alkylcarbonyl, alkyloxycarbonyl, alkyloxyalkylcarbonyl and mono—or di(alkyl)aminocarbonyl;

a and b are asymmetric centres centers;

(CH₂)_m is a straight hydrocarbon chain of m carbon atoms, m being an integer ranging from 1 to 4;

Pir is a radical according to any one of Formula (IIa), (IIb) or (IIc)

Office Action Dated: September 27, 2006

$$(\underline{\mathbf{IIa}}) \qquad (\underline{\mathbf{IIb}}) \qquad (\underline{\mathbf{IIc}})$$

optionally substituted with n radicals R⁸, wherein:

each R⁸ is independently from each other, selected from the group of hydroxy, amino, nitro, cyano, halo and alkyl;

n is an integer ranging from 0 to 5;

R⁹ is selected from the group of hydrogen, alkyl and formyl;

R³ is a radical according to any one of Formula (IIIa), (IIIb) or (IIIc)

$$(a) \qquad (B^{6})_{p} \qquad (R^{6})_{p} \qquad (R^{6})_{p} \qquad (III)$$

wherein:

is a single bond while Z is either a bivalent radical selected from the group of $-CH_2$ -, -C(=O)-, -CH(OH)-, -C(=N-OH)-, -CH(alkyl)-, -O-, -S-, -S(=O)-, -NH- and -SH-; or Z is a trivalent CH-moiety that forms a covalent bond with R^4 equal to alkyl, such that a cycloalkyl moiety is formed; or d is a double bond while Z is either a trivalent radical of formula =CH- or =C(alkyl)-; or Z is a trivalent CH-moiety that forms a covalent bond with R^4 equal to alkyl, such that a cycloalkenyl moiety is formed;

A is a 5- or 6-membered aromatic homocyclic or heterocyclic ring, selected from Page 12 of 21

Application No.: 10/510,220

Office Action Dated: September 27, 2006

the group of phenyl, pyranyl, pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, thienyl, isothiazolyl, pyrrolyl, imidazolyl, pyrazolyl, furanyl, oxadiazolyl and isoxazolyl;

- p is an integer ranging from 0 to 6;
- R⁴ and R⁵ are each, independently from each other, selected from the group of hydrogen, alkyl, Ar, biphenyl, halo and cyano; or
- R^4 and R^5 may be taken together to form a bivalent radical - R^4 - R^5 selected from the group of - CH_2 -, - CH_2 -, - CH_2 - CH_2 -, - CH_2 -CH-, - CH_2 -, - CH_2 -,
- each R⁶ is independently from each other, selected from the group of hydroxy, amino, nitro, cyano, halo, carboxyl, alkyl, Ar, alkyloxy, Ar-oxy, alkylcarbonyloxy, alkyloxycarbonyl, alkylthio, mono- and di(alkyl)amino, alkylcarbonylamino, mono- and di(alkyl)aminocarbonyl, mono- and di(alkyl)aminocarbonyloxy, mono- and di(alkyl)aminoalkyloxy; or
- two vicinal radicals R^6 may be taken together to form a bivalent radical $-R^6$ - R^6 selected from the group of $-CH_2$ - CH_2 -O-, -O- CH_2 - CH_2 -, -O- CH_2 - CH_2 -O-, $-CH_2$ - CH_2 -O-, $-CH_2$ - CH_2 -O-, $-CH_2$ - CH_2 -O-, $-CH_2$ - CH_2 - CH_2 -O-, $-CH_2$ - CH_2 -
- R¹⁶ is selected from the group of hydrogen, alkyl, Ar and Ar-alkyl;
- alkyl represents a straight or branched saturated hydrocarbon radical having from 1 to 6 carbon atoms or a cyclic saturated hydrocarbon radical having from 3 to 6 carbon atoms, optionally substituted with one or more methyl, halo, cyano, oxo, hydroxy, alkyloxy or amino radicals;
- alkenyl represents a straight or branched unsatured hydrocarbon radical having one or more double bonds, optionally substituted with one or more methyl, halo, cyano, oxo, hydroxy, alkyloxy or amino radicals;

Office Action Dated: September 27, 2006

Ar represents phenyl or naphthyl, optionally substituted with one or more radicals selected from the group of alkyl, halo, cyano, oxo, hydroxy, alkyloxy and amino; and

Het is a monocyclic heterocyclic radical selected from the group of azetidinyl, pyrrolidinyl, dioxolyl, imidazolidinyl, pyrrazolidinyl, piperidinyl, homopiperidinyl, morpholinyl, dithianyl, thiomorpholinyl, piperazinyl, imidazolidinyl, tetrahydrofuranyl, 2H pyrrolyl, pyrrolinyl, imidazolinyl, pyrrazolinyl, pyrrolyl, imidazolyl, pyrazolyl, triazolyl, furanyl, thienyl, oxazolyl, isoxazolyl, thiazolyl, thiadiazolyl, isothiazolyl, pyridinyl, pyridinyl, pyridinyl, pyridazinyl and triazinyl and benzylpiperazinyl; each radical optionally substituted with one or more radicals selected from the group of alkyl, Ar, Ar alkyl, halo, cyano, oxo, hydroxy, alkyloxy and amino.

wherein a compound according to Formula (IV) is reacted with an amine of Formula (V) according to the following reaction

19. (New) A compound according to the general Formula (I)

$$R^1$$
 R^3 R^2 X R^3 R^3 (I)

the pharmaceutically acceptable acid or base addition salts thereof, the stereochemically isomeric forms thereof and the *N*-oxide form thereof, wherein:

X is O;

R⁷ is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, alkylcarbonyl, alkyloxycarbonyl and mono- and di(alkyl)aminocarbonyl;

Application No.: 10/510,220

Office Action Dated: September 27, 2006

 R^1 and R^2 are each selected from the group of hydrogen, hydroxy, cyano, halo, OSO_2H , OSO_2CH_3 , $N-R^{10}R^{11}$, alkyloxy, alkyloxyalkyloxy, alkyloxyalkyloxyalkyloxy, tetrahydrofuranyloxy, alkylthio, alkylcarbonyloxy, alkyloxyalkyloxyalkyloxyonyloxy, pyridinylcarbonyloxy, alkylcarbonyloxyalkyloxy, alkyloxycarbonyloxy, alkenyloxy, alkenyloxybonyloxy and mono- or di(alkyl)aminoalkyloxy; with the proviso that at least one of R^1 and R^2 is $N-R^{10}R^{11}$ wherein:

R¹⁰ and R¹¹ are each, independently from each other, selected from the group of hydrogen, alkyl, Het, Ar, Ar-alkyl, Het- alkyl, mono- or di(alkyl)aminoalkyl, mono- or di(alkenyl)aminoalkyl, alkylcarbonyl, alkenylcarbonyl, Ar-carbonyl, Het-carbonyl, alkyloxycarbonyl, aminocarbonyl, mono- or di(alkyl)aminocarbonyl, mono- or di(alkyl)aminocarbonylalkyl)aminocarbonyl, alkylcarbonyloxyalkyl, alkenylcarbonyloxyalkyl, mono-or di(alkyl)aminocarbonyloxyalkyl, aminoiminomethyl, alkylaminoiminomethyl, N-benzylpiperazinyliminomethyl, alkylsulphonyl and Ar-sulphonyl; or

R¹⁰ and R¹¹ may be taken together and with the N may form a monovalent radical selected from the group of

$$(R^{13})_q$$
 $(R^{13})_q$
 $(R^{13})_q$

wherein:

R¹² is selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, Ar-alkenyl, alkylcarbonyl, alkyloxycarbonyl, alkyloxyalkylcarbonyl and mono- or di(alkyl)-aminocarbonyl;

each ring having optionally 1, 2 or 3 double bonds and each ring being optionally substituted with q radicals R^{13} , each radical R^{13} independently from Page 15 of 21

Office Action Dated: September 27, 2006

each other selected from the group of alkyl, oxo, Ar, Ar-alkyl, Ar-alkenyl and alkyloxycarbonyl and q being an integer ranging from 0 to 6; or

 R^1 and R^2 may be taken together to form a bivalent radical $-R^1-R^2$ - selected from the group of $-O-CH_2-NR^{14}$ -, $-NR^{14}-CH_2-O$ -, $-NR^{15}-CH_2-NR^{14}$ -, $-NR^{14}-CH_2-CH_2-O$ -, $-O-CH_2-CH_2-NR^{14}$ -, $-NR^{15}-CH_2-CH_2-NR^{14}$ -, - wherein R^{14} and R^{15} each, independently from each other, are selected from the group of hydrogen, alkyl, Ar, Ar-alkyl, alkylcarbonyl, alkyloxycarbonyl, alkyloxyalkylcarbonyl and mono- or di(alkyl)aminocarbonyl;

a and b are asymmetric centers;

 $(CH_2)_m$ is a straight hydrocarbon chain of m carbon atoms, m being an integer ranging from 1 to 4;

Pir is a radical according to any one of Formula (IIa), (IIb) or (IIc)

$$(IIa) \qquad (IIb) \qquad (IIc)$$

optionally substituted with n radicals R⁸, wherein:

each R⁸ is independently from each other, selected from the group of hydroxy, amino, nitro, cyano, halo and alkyl;

n is an integer ranging from 0 to 5;

R⁹ is selected from the group of hydrogen, alkyl and formyl;

R³ is a radical according to any one of Formula (IIIa), (IIIb) or (IIIc)

Office Action Dated: September 27, 2006

$$(a) \qquad (B^6)_p \qquad (R^6)_p \qquad (R^6)_p \qquad (III)$$

wherein:

is a single bond while Z is either a bivalent radical selected from the group of $-CH_2$ -, -C(=O)-, -CH(OH)-, -C(=N-OH)-, -CH(alkyl)-, -O-, -S-, -S(=O)-, -NH- and -SH-; or Z is a trivalent CH-moiety that forms a covalent bond with R^4 equal to alkyl, such that a cycloalkyl moiety is formed; or d is a double bond while Z is either a trivalent radical of formula =CH- or =C(alkyl)-; or Z is a trivalent CH-moiety that forms a covalent bond with R^4 equal to alkyl, such that a cycloalkenyl moiety is formed;

A is a 5- or 6-membered aromatic homocyclic or heterocyclic ring, selected from the group of phenyl, pyranyl, pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, thienyl, isothiazolyl, pyrrolyl, imidazolyl, pyrazolyl, furanyl, oxadiazolyl and isoxazolyl;

p is an integer ranging from 0 to 6;

R⁴ and R⁵ are each, independently from each other, selected from the group of hydrogen, alkyl, Ar, biphenyl, halo and cyano; or

 R^4 and R^5 —may be taken together to form a bivalent radical -R 4 -R 5 - selected from the group of -CH $_2$ -, -CH $_2$ -CH $_2$ -, -CH=CH- , -O-, -NH-, =N-, -S-, -CH $_2$ N(-alkyl)-, -N(-alkyl)CH $_2$ -, -CH $_2$ NH-, -NHCH $_2$ -, -CH=N-, -N=CH-, -CH $_2$ O- and -OCH $_2$ - ;

each R⁶ is independently from each other, selected from the group of hydroxy, amino, nitro, cyano, halo, carboxyl, alkyl, Ar, alkyloxy, Ar-oxy, alkylcarbonyloxy, alkyloxycarbonyl, alkylthio, mono- and di(alkyl)amino, alkylcarbonylamino, mono- and di(alkyl)aminocarbonyloxy,

Application No.: 10/510,220

Office Action Dated: September 27, 2006

mono- and di(alkyl)aminoalkyloxy; or

two vicinal radicals R^6 may be taken together to form a bivalent radical $-R^6$ - R^6 - selected from the group of $-CH_2$ - CH_2 -O-, -O- CH_2 - CH_2 -, -O- CH_2 - CH_2 -O-, $-CH_2$ - CH_2 -O-, $-CH_2$ - CH_2 -O-, $-CH_2$ - CH_2 -O-, $-CH_2$ - CH_2 -CH₂-O-, $-CH_2$ - CH_2 -CH₂- $-CH_2$ - $-CH_2$ -CH₂- $-CH_2$ - $-CH_2$ -

R¹⁶ is selected from the group of hydrogen, alkyl, Ar and Ar-alkyl;

alkyl represents a straight or branched saturated hydrocarbon radical having from 1 to 6 carbon atoms or a cyclic saturated hydrocarbon radical having from 3 to 6 carbon atoms, optionally substituted with one or more methyl, halo, cyano, oxo, hydroxy, alkyloxy or amino radicals;

alkenyl represents a straight or branched unsatured hydrocarbon radical having one or more double bonds, optionally substituted with one or more methyl, halo, cyano, oxo, hydroxy, alkyloxy or amino radicals;

Ar represents phenyl or naphthyl, optionally substituted with one or more radicals selected from the group of alkyl, halo, cyano, hydroxy, alkyloxy and amino; and is a monocyclic heterocyclic radical selected from the group of azetidinyl,

Het is a monocyclic heterocyclic radical selected from the group of azetidinyl, pyrrolidinyl, piperidinyl, homopiperidinyl, morpholinyl, piperazinyl, tetrahydrofuranyl, pyridinyl, and benzylpiperazinyl.